

REMARKS

This Amendment submitted in response to the Office Action dated January 20, 2004, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-21 are now pending in the present application. Claims 1-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mayer in view of Abe. Applicant submits the following in traversal of the rejections.

Claim 1

The Examiner cites Mayer for teaching establishing a tandem free operation mode for a mobile station to mobile station and cell to cell call in a cellular mobile telephone system.

The measures according to claim 1 of Mayer yield an improvement in the quality of data transmitted, in particular *in tandem operation* with connections between mobile stations. See Abstract and page 1, para. 0004.

The Examiner cites paragraph 0013 for teaching establishing a tandem free operation mode for a mobile station to mobile station and cell to cell call in a cellular mobile telephone system. Paragraph 0013 describes that if the transcoders of two subscriber's are capable of tandem free operation (TFO), then TFO will be applied. If either of the transcoders are incapable of handling TFO then they will perform a normal operation of coding and decoding speech.

At most, Mayer discloses establishing TFO based on transcoding rate adaption unit (TRAU) frame identification information. See page 2, para. 20. There is no indication of a method for establishing tandem free operation as recited in claim 1.

The Examiner replaces the TFO establishment aspect of Mayer with Abe stating that Abe teaches a method of establishing a tandem free operation mode for a mobile station to a mobile station includes a step of selecting a common coding mode for *each* mobile station, citing Abe col. 3, lines 28-43.

Abe does not teach TFO. In particular, Abe describes transmission on the radio interface between base stations and mobile stations. On the other hand, TFO involves transmission in the wired part of the network. For example, referring to the figures of the present application, the transmission between the entity noted BSSA and the entity noted TCA, the transmission between the two entities noted TCA and TCB, and the transmission between the entity noted TCB and the entity noted BSSB (where BSS is used for Base Station Subsystem and TC is used for Transcoder) take place in the wired part of the network.

Furthermore, Abe describes encoding methods for communication between a base station and a mobile station. When a base station encodes a transmission signal, a suitable encoding method is selected from a plurality of encoding methods based on traffic conditions of the mobile station. See Abstract. The focus of Abe is the selection of an encoding method between *a base station and a mobile station*.

The respective column and lines (col. 3, lines 28-43) of Abe cited by the Examiner describes that a base station has eight modes for encoding and decoding signals for transmission

or reception. The control section 12 of the base station selects one mode from the eight modes for the base station.

Abe merely describes selecting a coding mode for a base station. There is no indication that the mode selected is common to each mobile station. Therefore, a *common* coding mode is not selected for *each* mobile station in a mobile station to mobile station and cell to cell call in a cellular mobile telephone system, as described in the present invention.

The Examiner also cites Abe for teaching that the selection of a common coding mode takes account of the traffic load in at least one cell, citing col. 8, lines 64 to col. 9, lines 9.

Although Abe takes traffic congestion into consideration in selecting a coding mode, there is no indication that the selected coding mode is a *common* coding mode to each mobile station. The base station merely instructs that the modes should be changed for the mobile stations.

Furthermore, the combination of Mayer and Abe is not obvious. Mayer teaches a mode of establishing TFO according to TRAU frame information. See para. 0025. Assuming Abe teaches the aspects of the present invention as indicated by the Examiner, there is no reason to completely modify the method of establishing TFO as described in Mayer. This would require a substantial reconstruction of the operation of Mayer, evincing that the Examiner's reasoning is merely a result of hindsight. MPEP 2143.01.

For the above reasons, claim 1 and its dependent claims should be deemed patentable.

Claim 2

Claim 2 describes that the common coding mode is selected on the basis of lists of coding modes support by each mobile station. The Examiner again cites col. 8, line 64 to col. 9, line 9 of Abe in support. As previously stated, there is no indication that *a common coding mode* is selected for each mobile station.

Claim 2 further describes that if the corresponding mobile station is in a busy cell the list of supported coding modes is shortened to eliminate therefrom the coding mode that consumes the most resources. The Examiner cites col. 3, lines 28-43 for teaching this aspect of claim 2.

As previously indicated, col. 3, lines 28-43 describes the selection of one mode from eight possible modes. There is no indication that the list of eight possible modes is shortened to eliminate the coding modes that consume the most resources. Therefore, claim 2 should be deemed patentable.

Claim 3

Claim 3 describes that a common coding mode is selected on the basis of non-shortened lists of supported coding modes if no common coding mode can be selected on the basis of lists of supported coding modes at least one of which is a shortened list.

As indicated with respect to claim 2, there is no indication that the coding mode list of Abe is shortened. Therefore, a common coding mode is not selected on the basis of non-shortened lists of supported coding modes **if** no common coding mode can be selected on the

basis of lists of supported coding modes at least one of which is a shortened list. Therefore, claim 3 should be deemed patentable.

Claim 4

Claim 4 describes that the selection of a common coding mode is based on quality optimization criterion. The Examiner again cites col. 3, lines 28-43 of Abe for teaching this aspect of the invention. However, there is no indication in the respective column and lines cited by the Examiner of a selection of a common coding mode, let alone that the selection be based on quality optimization criterion. Therefore, claim 4 should be deemed patentable.

Claims 5-8

The Examiner's rejection of claims 5-8 suffers from the same deficiencies indicated above. In particular, Abe does not describe that a common coding mode is selected for each mobile station.

Claim 12

Claim 12 describes the coding modes consuming the most resources is enhanced full-rate mode. There is no indication of an enhanced full-rate coding mode in Mayer or Abe. Therefore, claim 12 should be deemed patentable. Since claims 15 and 18 describes similar elements, they should be deemed patentable for the same reasons.

Claim 16

Claim 16 describes that the list of supported coding modes is shortened to half-rate (HR) mode if the coding mode initially selected for a mobile station is HR mode and the corresponding cell is busy. The Examiner cites Mayer page 1, para. 0007 for teaching claim 16.

Paragraph 0007 describes that the speech decoder of the transcoder can be switched off or used for other purposes such as for full rate or half rate code conversion in the downlink path. There is no indication that a list of supported coding modes is shortened to half-rate (HR) mode if the coding mode initially selected for a mobile station is HR mode and the corresponding cell is busy. Therefore, claim 16 should be deemed patentable.

Applicant has added claim 19-21 to further define the present invention. Claim 19 should be deemed patentable by virtue of its dependency to claim 1. Since claims 20 and 21 describe subject matter similar to claims 1 and 2, they should be deemed patentable for the same reasons.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
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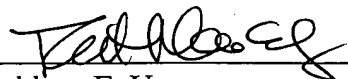
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